

## Patent claims

Sub A127  
Cont.  
5 1. A method for transmitting service data in telecommunication systems with wireless telecommunication based on a predefined radio interface protocol between telecommunication devices, especially voice data and/or packet data in DECT systems, having the following features:

(a) the service data are transmitted in protocol data units (PDU5...PDU7) predefined by the radio interface protocol,

10 (b) at least one service data unit (SDU4...SDU6) configured at least as a fragment (FR3...FR6) is transmitted in each protocol data unit (PDU5...PDU7) independently of the size of the service data unit (SDU4...SDU6), which is configured at least as a fragment, in comparison with the size of the free part of the protocol data unit (PDU5...PDU7) which is in each case not yet occupied by service data,

15 (c) a service data length, which differs from the value "zero", of the respective service data unit (SDU4...SDU6) configured at least as a fragment (FR3...FR6) is in each case specified by a first information item (IN1) allocated to the protocol data unit (PDU5...PDU7),  
20

(d) the end of the respective service data unit (SDU4...SDU6) is in each case specified by a second information item (IN2) allocated to the protocol data unit (PDU5...PDU7),

25 (e) the non-end of the respective service data unit (SDU4...SDU6) is in each case specified by a third information

A12  
 concl.

item (1N3) allocated to the protocol data unit (PDU5...PDU7), a fourth information item (1N4) corresponding to 35 the value "zero" of the service data length is specified or, respectively, allocated to the protocol data unit (PDU5...PDU7), together with

5 the second information item (1N2) in the protocol data unit (PDU5...PDU7) when the transmission of service data is ended at least temporarily, especially within this protocol data unit.

2. The method as claimed in claim 1, characterized in that the service data are transmitted protected.

3. The method as claimed in claim 1 or 2, characterized in that the first information item (1N1), the second information item (1N2) and the third information item (1N3) are arranged in front of the service data unit (SDU4...SDU6), which is at least configured as a fragment, in the respective protocol data unit (PDU5...PDU7).

4. The method as claimed in one of claims 1 to 3, characterized in that the second information item (1N2) consists of the value "0" of a bit and the third information item (1N3) consists of the value "1" of the bit.

Add A137